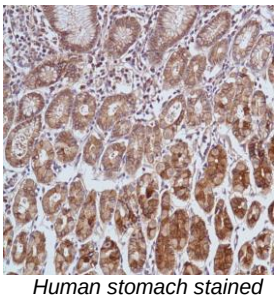
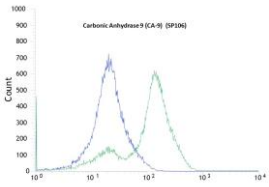
Rabbit Anti-Human Carbonic Anhydrase 9 (CA-9) Monoclonal Antibody (Clone SP106)



Human stomach stained with anti-CA-9 antibody



Flow cytometric analysis of rabbit anti-CA-9 (SP106) antibody in HT29 (green) compare to negative control of rabbit IgG (blue)

CATALOG #:

M4060 0.1 ml rabbit monoclonal antibody purified by protein A/G in PBS/1% BSA buffer pH 7.6 with less than 0.1% sodium azide.

M4062 0.5 ml rabbit monoclonal antibody purified by protein A/G in PBS/1% BSA buffer pH 7.6 with less than 0.1% sodium azide.

M4064 1.0 ml rabbit monoclonal antibody purified by protein A/G in PBS/1% BSA buffer pH 7.6 with less than 0.1% sodium azide.

M4061 7.0 ml pre-diluted rabbit monoclonal antibody purified by protein A/G in TBS/1% BSA buffer pH 7.6 with less than 0.1% sodium azide.

INTENDED USE: For Research Use Only. Not for use in diagnostic procedures.

CLONE: SP106

IMMUNOGEN: Synthetic peptide derived from human CA-9

IG ISOTYPE: Rabbit IgG

EPITOPE: Internal region

MOLECULAR WEIGHT: 50kDa

SPECIES REACTIVITY: Human (tested). (See www.springbio.com for information on species reactivity predicted by sequence homology.)

DESCRIPTION: Carbonic anhydrase (CA) is an enzyme that assists rapid inter-conversion of carbon dioxide and water into carbonic acid, protons, and bicarbonate ions. It is abundant in all mammalian tissues. There are many genes that are inducible by hypoxia, via HIF-1 alpha. CA-9 is one of the most inducible genes because of its stability and location within the membrane. Carbonic anhydrases have a widespread role in regulating pH in normal tissues, by regulating hydrogen ion (H+) flux. The pH is important in cell death under hypoxia, thus a blockade of CA 9 results in increased cell death under hypoxia. Therefore, CA-9 has become a reliable histochemical marker of hypoxia.

APPLICATIONS: Immunohistochemistry (IHC) and Flow Cytometry

IHC PROCEDURE:

Specimen Preparation: Formalin-fixed, paraffin-embedded tissues are suitable for use with this primary antibody.
Deparaffinization: Deparaffinize slides using xylene or xylene alternative and graded alcohols.
Antibody Dilution: If using the concentrate format of this product, dilute the antibody 1:100. The dilutions are estimates; actual results may differ because of variability in methods and protocols.
Antigen Retrieval: Boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at room temperature for 20 min.
Primary Antibody Incubation: Incubate for 10 minutes at room temperature.
Slide Washing: Slides must be washed in between steps. Rinse slides with PBS/0.05% Tween.
Visualization: Detect the antibody as instructed by the instructions provided with the visualization system.

IHC POSITIVE CONTROL: Stomach

FLOW CYTOMETRY: Recommended starting protocol: Dilute the antibody 1:100. Incubate for 30 minutes at 4°C.
The dilution is an estimate; actual results may differ because of variability in methods and protocols. Optimal dilution and procedure should be determined by the end user.

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FLOW CYTOMETRY POSITIVE CONTROL:	HeLa Cell Line
CELLULAR LOCALIZATION:	Membrane, Nucleus
STORAGE & STABILITY:	Store at 2-8°C. Do not freeze. The user must validate any other storage conditions. When properly stored, the reagent is stable to the date indicated on the label. Do not use the reagent beyond the expiration date. There are no definitive signs to indicate instability of this product; therefore, positive and negative controls should be tested simultaneously with unknown specimens. If unexpected results are observed which cannot be explained by variations in laboratory procedures and a problem with the reagent is suspected, contact Technical Support at spring.tech@ventana.roche.com.
WARNINGS & PRECAUTIONS:	1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water. 2. This product is harmful if swallowed. 3. Consult local or state authorities with regard to recommended method of disposal. 4. Avoid microbial contamination of reagents.

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